Amendment to the Claims

In the Claims:

Please amend Claims 1, 3, 5, 7, 9 - 16, 18 - 23, 36, 37, 39, 40, 46, 47, 49, 52 - 54, 58, 59, and 61, and add new Claim 62, as shown below.

Please cancel Claim 60 (Claims 24-35 having been previously cancelled).

- 1. (Currently Amended) A method of migrating at least one client to a selected version of a server-hosted application on a network, where multiple versions at least two different versions of the server-hosted application are available on the network, such that direction of a client to use a specific version may be transparent to a client, comprising the steps of:
- (a) installing the multiple versions at least two different versions of the server-hosted application on the network, wherein the at least two different versions of the server-hosted application are not simply copies of a single release of the server-hosted application, but wherein each different version of the at least two different versions of the server-hosted application corresponds to a different release of the server-hosted application, each different release incorporating at least one modification relative to any other release of the server-hosted application;
- (b) creating a register identifying clients having access to the server-hosted application and indicating in the register a version which of the at least two different versions of the server-hosted application that is associated with each client having access to the server-hosted application;
- (c) changing an association in the register of at least one client selected from those clients identified in the register to a different version of the at least two different versions of the server-hosted application; and
- (d) directing each client attempting to access the server-hosted application to the version corresponding to one of the at least two different versions of the server-hosted application with which the client is associated in the register, without requiring that any client be aware of the migration to the different version.
- 2. (Original) The method of Claim 1, wherein the register comprises meta information for each client.

- 3. (Currently Amended) The method of Claim 2, wherein the meta information for each client includes a status of the client and a version identifier that indicates the version which of the at least two different versions of the server-hosted application is associated with the client.
- 4. (Original) The method of Claim 3, wherein the meta information further comprises a location from where server-hosted application data of a client can be retrieved.
- 5. (Currently Amended) The method of Claim 1, further comprising the step of grouping together version specific server-hosted application data into different data structures, such that at least one data structure exists for each version of the hosted application of the at least two different versions of the server-hosted application, and each at least one data structure includes version specific server-hosted application data unique to only one version of the hosted application of the at least two different versions of the server-hosted application.
- 6. (Original) The method of Claim 1, further comprising the step of grouping together non version specific server-hosted application data into a single data structure.
- 7. (Currently Amended) The method of Claim 1, further comprising the step of grouping together client specific server-hosted application data into different data structures based on the version of the <u>server-hosted</u> application that is associated with the client specific server-hosted application data, so that a different client data structure exists for each <u>version of the server-hosted</u> application of the at least two different versions of the server-hosted application.
- 8. (Original) The method of Claim 1, wherein the register comprises a separate data structure.
- 9. (Currently Amended) The method of Claim 1, wherein the step of directing each client attempting to access the server-hosted application to the version of the corresponding one of the at least two different versions of the server-hosted application associated with the client comprises the step of examining a request from each client for access to the server-hosted application to determine if the request contains a reference to the version the one of the at least two different versions of the server-hosted application with which the client making the request is associated.
- 10. (Currently Amended) The method of Claim 9, wherein when a request from a client does not include a reference to the version of the server-hosted application to which of the at least two different versions of the server-hosted application the client should be directed, further comprising the step of incorporating a reference to the version of the server-hosted application one of the at least

two different versions of the server-hosted application to which the client should be directed in a cookie returned to the client from the server, such that when the client makes a future request, the register does not need to be consulted to determine the version of the server hosted application to which to which of the at least two different versions of the server-hosted application the client should be directed.

- 11. (Currently Amended) The method of Claim 1, further comprising the step of examining a request from a client for access to the server-hosted application to determine if the request contains a reference to the version of the server-hosted application to which of the at least two different versions of the server-hosted application the client should be directed, before consulting the register to determine the version of the server-hosted application to which of the at least two different versions of the server-hosted application to be directed.
- 12. (Currently Amended) The method of Claim 11, wherein when a request from a client does not include a reference to the version of the server-hosted application to which of the at least two different versions of the server-hosted application the client should be directed, further comprising the step of incorporating a reference to the version of the server-hosted application one of the at least two different versions of the server-hosted application to which the client should be directed in a cookie returned to the client from the server, such that when the client makes a future request, the register does not need to be consulted to determine to which version of the server-hosted application of the at least two different versions of the server-hosted application the client should be directed.
- 13. (Currently Amended) The method of Claim 1, wherein when a client attempts to access the server-hosted application and is not identified in the register, further comprising the steps of defining one of the at least two different versions of the server-hosted application as a default version of the server-hosted application, and associating the client with [[a]] the default version of the server-hosted application; and, adding information identifying the client as being associated with the default version of the server-hosted application, to the register.
- 14. (Currently Amended) The method of Claim 13, further comprising the step of incorporating a reference to the default version of the server-hosted application in a cookie returned to the client from the server, such that when that client makes a future request, the register does not

need to be consulted to determine to which version of the server-hosted application of the at least two different versions of the server-hosted application the client should be directed.

- 15. (Currently Amended) The method of Claim 1, wherein when a client attempts to access the server-hosted application, and the request from the client includes a reference to the version of the server-hosted application one of the at least two different versions of the server-hosted application to which the unique client should be directed, but that reference fails to define a version of the server-hosted application the one of the at least two different versions of the server-hosted application with which data of the client are associated, further comprising the step of consulting the register to determine to which version of the server-hosted application of the at least two different versions of the server-hosted application the client should be directed.
- 16. (Currently Amended) The method of Claim 15, further comprising the steps of changing the reference to the version of the server-hosted application one of the at least two different versions of the server-hosted application contained in the request cookie to correspond with the version of the server-hosted application one of the at least two different versions of the server-hosted application identified by the register, and returning the cookie that is thus corrected to the client, so that when the client makes a future request, the future request will properly reference the version of the server-hosted application one of the at least two different versions of the server-hosted application with which the client is associated.
- 17. (Original) A machine-readable medium having machine instructions for performing the steps of Claim 1.
- 18. (Currently Amended) A system for migrating at least a portion of a plurality of clients to a selected specific unique version of a server-hosted application on a network to which the plurality of clients is coupled, where multiple versions at least two unique versions of the server-hosted application are available on the network, such that direction of a client to use a specific version of the server-hosted application may be transparent to a user, comprising:
 - (a) a computing device for each client coupled to the network; and
- (b) a server having a processor and a memory in communication with the processor, said memory storing machine instructions that when executed by the processor, cause the processor to:
- (i) install the multiple versions at least two unique versions of the server-hosted application for access over the network, wherein the at least two unique versions are

not simply identical copies of a single release of the server-hosted application, but each of the at least two unique versions of the server-hosted application corresponds to a different release of the server-hosted application, each different release including at least one modification relative to any other release of the server-hosted application;

- (ii) create a register identifying the plurality of clients having access to the server-hosted application and including an association of a version a specific one of the at least two unique versions of the server-hosted application with each client having access to the server-hosted application;
- (iii) change an association in the register of a first group of clients selected from the plurality of clients, to a different version one of the at least two unique versions of the server-hosted application; and
- (iv) direct each client attempting to access the server-hosted application to the version specific one of the at least two unique versions of the server-hosted application with which the client is associated in the register, without requiring that a user of any client be aware of the migration to the different version.
- 19. (Currently Amended) The system of Claim 18, wherein the machine instructions, when executed by the processor, further cause the processor to direct each client attempting to access the server-hosted application to the version specific one of the at least two unique versions of the server-hosted application with which the client is associated, by consulting the register to determine the version specific one of the at least two unique versions of the server-hosted application to which the client should be directed.
- 20. (Currently Amended) The system of Claim 18, wherein the machine instructions, when executed by the processor, further cause the processor to direct each client attempting to access the server-hosted application to the version specific one of the at least two unique versions of the server-hosted application with which the client is associated, by examining a request from each client to the server to determine if the request contains a reference to the version specific one of the at least two unique versions of the server-hosted application to which the client should be directed.
- 21. (Currently Amended) The system of Claim 20, wherein when the request does not include a reference to the version specific one of the at least two unique versions of the server-hosted application to which the client should be directed, the machine instructions cause the processor to

identify the version specific one of the at least two unique versions of the server-hosted application to which the client should be directed, by consulting the register.

- 22. (Currently Amended) The system of Claim 21, wherein when the request does not include a reference to the version specific one of the at least two unique versions of the server-hosted application to which the client should be directed, the machine instructions further cause the processor to incorporate a reference to the version specific one of the at least two unique versions of the server-hosted application to which the unique client should be directed in a cookie returned to the client from the server, such that when the client makes a future request, the register does not need to be consulted to determine to which version specific one of the at least two unique versions of the server-hosted application the client should be directed.
- 23. (Currently Amended) The system of Claim 18, wherein when a client attempts to access the server-hosted application, and the client is not identified in the register, the machine instructions further cause the processor to <u>define one of the at least two unique versions of the server-hosted application as a default version of the server-hosted application, and to associate the client with [[a]] the default version of the server-hosted application, and add the client in association with the default version of the server-hosted application, to the register.</u>
 - 24. 35. (Previously Cancelled)
- 36. (Currently Amended) A method of enabling a provider of a server-hosted application accessible via a network to migrate selected clients from a first version of said server-hosted application to a second version of said server-hosted application, such that at least one of the first version of the server-hosted application and the second version of the server-hosted application remains accessible to at least some clients of the network during the migration, comprising the steps of:
- (a) creating a register identifying each client having access to the server-hosted application, and associating each client having access to the server-hosted application with the first version of the server-hosted application, wherein the first version of the server-hosted application is already installed on the network, and wherein the first version of the server-hosted application and the second version of the server-hosted application are not simply copies of a specific release of the server-hosted application, but rather the first version of the server-hosted application and the second version of the server-hosted application are different releases of the server-hosted application, each

different release of these server-hosted application including at least one modification relative to any other release of the server-hosted application;

- (b) making the second version of the server-hosted application available on the network;
- (c) selecting a first group of clients from those clients identified in the register to be migrated to the second version of the server-hosted application;
- (d) changing the register so that the register indicates each client included in the first group of clients is associated with and allowed to access the second version of the server-hosted application, but not the first version of the server-hosted application;
- (e) each time that a client attempts to access the server-hosted application, automatically identifying the version which one of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access; and
- (f) automatically directing said client to the version one of the first version of the server-hosted application and the second version of the server-hosted application that the client is allowed to access.
- 37. (Currently Amended) The method of Claim 36, wherein the register comprises meta information for each client, said meta information including at least a status of each client and a version identifier that identifies the version which of the first version of the server-hosted application and the second version of the server-hosted application that the client is allowed to access.
- 38. (Original) The method of Claim 37, wherein the status comprises at least one of an active state and a being migrated state.
- 39. (Currently Amended) The method of Claim 38, wherein when data of any of the first group of clients must be reformatted to be compatible with the second version of the server-hosted application, for each client in the first group of clients whose data requires reformatting, further comprising the steps of:
- (a) modifying the register to identify the status of the client as in the being migrated state;
- (b) reformatting the data associated [[of]] with the client to be compatible with the second version of the server-hosted application; and

- (c) when the reformatting is completed, modifying the register to identify the status of the client as <u>being</u> in the active state.
- 40. (Currently Amended) The method of Claim 39, wherein if an error occurs in reformatting the data associated with the client[[;]], further comprising the steps of:
- (a) modifying the register to identify the status of the client as in the being migrated state;
- (b) reformatting the data associated of the client to be compatible with the first version of the server-hosted application; and
 - (c) when the reformatting is completed:
- (i) modifying the register to identify the status of the client as in the active state; and
- (ii) changing the register so that the register indicates the client is associated with and allowed to access the first version of the server-hosted application, but not the second version of the server-hosted application.
- 41. (Original) The method of Claim 38, further comprising the step of determining the status of each client attempting to access the server-hosted application, and if the status of the client is identified as being migrated, preventing the client from accessing the server-hosted application, until the status of the client is changed to the active state.
- 42. (Original) The method of Claim 38, further comprising the step of determining the status of each client attempting to access the server-hosted application, and if the status of the client is identified as being migrated, allowing the client only limited access to the server-hosted application, until the status of the client is changed to the active state.
- 43. (Original) The method of Claim 38, further comprising the step of determining the status of each client attempting to access the server-hosted application, and if the status of the client is identified as being migrated, allowing the client only limited access to the client's data stored by the server-hosted application, until the status of the client is changed to the active state.
- 44. (Original) The method of Claim 36, further comprising the step of making the first version of the server-hosted application unavailable to the network, if each client identified in the register as having access to the server-hosted application, is associated with the second version of the server-hosted application.

- 45. (Original) The method of Claim 36, wherein the step of automatically identifying the version of the server-hosted application that said client is allowed to access comprises the step of consulting the register to determine the version of the server-hosted application that said client is allowed to access.
- 46. (Currently Amended) The method of Claim 36, wherein the step of automatically identifying the version of the server-hosted application that said client is allowed to access comprises the step of examining a request from said client to the server, to determine if the request contains a reference to the version which one of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access.
- 47. (Currently Amended) The method of Claim 46, wherein if the request does not include the reference to the version which of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access, the step of automatically identifying the version which of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access comprises the step of consulting the register to determine the version which of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access.
- 48. (Original) The method of Claim 46, wherein if the request does not include any reference to the version of the server-hosted application that said client is allowed to access, further comprising the step of incorporating a reference to the version of the server-hosted application that said client is allowed to access in a cookie returned to said client from the server, such that when said client makes a future request, the register does not need to be consulted to determine the version of the server-hosted application.
- 49. (Currently Amended) The method of Claim 36, wherein when said client is not identified in the register, further comprising the steps of <u>defining one of the first version of the server-hosted application and the second version of the server-hosted application as a default version of the server-hosted application, associating said client with [[a]] the default version of the server-hosted application, and updating the register to identify said client and to indicate that said client is allowed to access the default version of the server-hosted application.</u>

- 50. (Original) The method of Claim 49, wherein said default version is the first version of the server-hosted application.
- 51. (Original) The method of Claim 49, wherein said default version is the second version of the server-hosted application.
- 52. (Currently Amended) The method of Claim 49, further comprising the step of incorporating a reference to the default version of the server-hosted application that said client is allowed to access in a cookie returned to said client from the server, such that when said client makes a future request, the register does not need to be consulted to determine the version which of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access.
- 53. (Currently Amended) The method of Claim 36, wherein when a request from said client to access the server-hosted application includes a reference to the version one of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access, but the reference fails to indicate a version the one of the first version of the server-hosted application and the second version of the server-hosted application with which data of said client is are associated, the step of automatically identifying the version the one of the first version of the server-hosted application and the second version of the server-hosted application comprises the step of consulting the register to determine the version which of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access.
 - 54. (Currently Amended) The method of Claim 53, further comprising the steps of:
- (a) changing the reference in the request to correspond to the version one of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access that is defined in the register; and
- (b) returning the changed reference to said client, such that when said client makes a future request, said future request properly references the version the one of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access.
- 55. (Original) The method of Claim 36, further comprising the steps of selecting a second group of clients from those clients identified in the register that are allowed to access the first version

of the server-hosted application, and changing the register so that the register indicates each client included in the second group of clients is associated with and allowed to access the second version of the server-hosted application, but not the first version of the server-hosted application.

- 56. (Original) The method of Claim 55, wherein when all clients identified in the register are associated with and only allowed access to the second version of the server-hosted application, further comprising the step of making the first version of the server-hosted application unavailable to the network.
- 57. (Original) A machine-readable medium having machine instructions for performing the steps of Claim 36.
- 58. (Currently Amended) A system for enabling a provider of a server-hosted application to migrate at least some clients from a first version of the server-hosted application to a second version of the server-hosted application, such that at least one version of the server-hosted application remains accessible to at least some of the clients during the migration, comprising:
- (a) a plurality of computing devices, each computing device comprising a different client; and
- (b) a server having a processor and a memory in communication with the processor, said memory storing machine instructions that when executed by the processor, cause the processor to:
- (i) maintain a register that identifies each client having access to the server-hosted application, for each client having access to the server-hosted application, associates the client with the first version of the server-hosted application, wherein the first version of the server-hosted application and the second version of the server-hosted application are not simply copies of a single release of the server-hosted application, but instead, the first version and the second version of the server-hosted application correspond to different releases of the server-hosted application including at least one modification relative to any other release of the server-hosted application;
- (ii) enable the <u>first version of the server-hosted application and the</u> second version of the server-hosted application to be made available to the clients at the same time;
- (iii) enable a first group of clients to be selected from those clients identified in the register, for migration to the second version of the server-hosted application;

- (iv) change the register so that the register indicates that each client included in the first group of clients is associated with and allowed to access the second version of the server-hosted application, but not the first version of the server-hosted application;
- (v) each time that any client attempts to access the server-hosted application, automatically identify the version which of the first version of the server-hosted application and the second version of the server-hosted application that said client is allowed to access; and
- (vi) direct said client to the version one of the first version of the serverhosted application and the second version of the server-hosted application that said client is allowed to access.
- 59. (Currently Amended) A method of migrating at least one client to a selected version of a server-hosted application on a network, where multiple versions of the server-hosted application are available on the network, such that direction of a client to use a specific version may be transparent to a client, the multiple versions including at least two different releases of same the server-hosted application, comprising the steps of:
- (a) installing the multiple versions a first version of the server-hosted application and a second version of the server-hosted application on the network, the first version of the server-hosted application and the second version of the server-hosted application corresponding to different releases of the server-hosted application, each different release of the server-hosted application incorporating at least one change relative to any other release of the server-hosted application, wherein each release of the server-hosted application is configured to execute processing remote from the client, and to transmit a result to the client, wherein the server-hosted application could have been executed by the client, if the server-hosted application resided on the client instead of on the network hosting the server-hosted application, even if the client did not have access to the network;
- (b) creating a register identifying clients having access to the server-hosted application and indicating in the register a version which of the first version of the server-hosted application and the second version of the server-hosted application that is associated with each client having access to the server-hosted application;

- (c) changing an association in the register of at least one client selected from those clients identified in the register to a different version one of the first version of the server-hosted application and the second version of the server-hosted application; and
- (d) directing each client attempting to access the server-hosted application to the version one of the first version of the server-hosted application and the second version of the server-hosted application with which the client is associated in the register, without requiring that any elient be aware of the migration to the different version.
 - 60. (Currently Canceled)
- 61. (Currently Amended) A method of enabling a provider of a server-hosted application to migrate selected clients from replace a first version of said server-hosted application [[to]] with a second version of said server-hosted application, such that at least one version of the server-hosted application remains accessible to at least some clients during the migration, the first version and the second version corresponding to two different releases of same the server-hosted application, comprising the steps of:
- (a) creating a register identifying each client having access to the server-hosted application, and associating each client having access to the server-hosted application with the first version of the server-hosted application;
- (b) making the second version of the server-hosted application available on the network, wherein the first version of the server-hosted application and the second version of the server-hosted application correspond to different releases of the server-hosted application, each different release of the server-hosted application incorporating at least one change relative to any other release of the server-hosted application;
- (c) selecting a first group of clients from those clients identified in the register to be migrated to the second version of the server-hosted application;
- (d) changing the register so that the register indicates each client included in the first group of clients is associated with and allowed to access the second version of the server-hosted application, but not the first version of the server-hosted application;
- (e) each time that a client attempts to access the server-hosted application, automatically identifying the version of the server-hosted application that said client is allowed to access; [[and]]

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- (f) automatically directing said client to the version of the server-hosted application that the client is allowed to access; and
- (g) once all of the clients of the server-hosted application have been migrated to the second version of the server-hosted application, removing the first version of the server-hosted application from the network, thereby replacing the first version of the server-hosted application with the second version of the server-hosted application.
- 62. (New) A method of migrating at least one client to a selected version of a server-hosted application on a network, where multiple versions of the server-hosted application are available on the network, such that direction of a client to use a specific version may be transparent to the client, comprising the steps of:
 - (a) installing the multiple versions of the server-hosted application on the network;
- (b) creating a register identifying clients having access to the server-hosted application and indicating in the register a version of the server-hosted application that is associated with each client having access to the server-hosted application;
- (c) changing an association in the register of at least one client selected from those clients identified in the register to a different version of the server-hosted application; and
- (d) directing each client attempting to access the server-hosted application to the version of the server-hosted application with which the client is associated in the register, without requiring that any client be informed of the migration to the different version.

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